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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,281	12/07/2001	Masayoshi Nakano	JP920000367US1	5932

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EXAMINER	
PRIZIO JR, PETER	

ART UNIT	PAPER NUMBER
2674	4

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/683,281	NAKANO ET AL.	
	Examiner	Art Unit	
	Peter Prizio	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 recites the limitation "the frequency of the electromagnetic wave generated from said pen" in line 2. There is insufficient antecedent basis for this limitation in the claim. The independent claim makes no reference to frequency or electromagnetic waves, but will continue to be examined as if there were a reference.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claim 12 is rejected under 35 U.S.C. 102(a) as being anticipated by US Patent 6,067,080 to Holtzman. Holtzman teaches a digitizer comprising a pen information recognition unit (column 4, lines 55 – 60), track recognition unit for recognizing a track of a pen (column 4, lines 50 – 53), an output unit for generating position from the track recognized by the track recognition unit (column 4, lines 41+).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.

8. Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holtzman in view of US Patent 5,737,740 to Henderson et al. (Henderson) and in view of US Patent 5,599,122 to Yu.

9. Regarding claim 1, Holtzman teaches a pen input apparatus comprising a pen input apparatus (column 4, lines 40 – 45), a type recognition unit (column 4, lines 55 – 60), and a transmitter (column 4, lines 60 – 65). Holtzman does not teach a plurality of penpoints, but does suggest the use of alternate marking devices (column 4, lines 55 – 60). Henderson teaches using multiple digitizer pens (column 5, lines 44 – 61), but does not teach one pen with multiple penpoints. However, Yu (figs. 1 & 2) does teach a pen with multiple penpoints (11) and a selector (13).

10. Regarding claim 2, Holtzman, as applied to claim 1, further teaches a frequency generator for generating a different frequency for each penpoint (column 5, lines 35 – 31) and a recognition unit based on the frequency (column 5, lines 35 – 31) and Henderson, as applied to claim 1 above, further teaches an electromagnetic wave outputting unit (column 2, lines 30 – 38).

11. Regarding claim 3, Holtzman in view of Henderson and in view of Yu, as applied to claim 2, Henderson further teaches a penpoint ground detector (column 5, lines 33 – 36) and outputting an electromagnetic wave based on the penpoint grounded by the penpoint ground detector (column 5, lines 37 – 43) while Yu teaches a selector including a penpoint pushing-out mechanism (13 and Fig. 3).

12. Regarding claim 4, Holtzman in view of Henderson and in view of Yu, as applied to claim 1, Henderson further teaches a computer system including an application for generating image information (column 12, line 61 to column 13, line 9).

13. Regarding claim 5, Holtzman teaches an electronic input apparatus comprising a coordinate information recognition unit for recognizing a track drawn with a pen as coordinate information (column 4, lines 50 – 53), a type recognition unit (column 4, lines 55 – 60), and a transmitter (column 4, lines 60 – 65). Holtzman does not teach a plurality of penpoints, but does suggest the use of alternate marking devices (column 4, lines 55 – 60). Henderson teaches using multiple digitizer pens (column 5, lines 44 – 61), but does not teach one pen with multiple penpoints. However, Yu (figs. 1 & 2) does teach a pen with multiple penpoints (11) and a selector (13).

14. Regarding claim 6, Holtzman, as applied to claim 5, further teaches a frequency generator for generating a different frequency for each penpoint (column 5, lines 35 – 31) and a recognition unit based on the frequency (column 5, lines 35 – 31) and Henderson, as applied to claim 1 above, further teaches an electromagnetic wave outputting unit (column 2, lines 30 – 38).

15. Regarding claim 7, Holtzman teaches an electronic input apparatus comprising a digitizer for grasping a track drawn by penpoint (column 4, lines 50 – 53), recognizing the attributes of the penpoint (column 4, lines 55 – 60), and an interface for outputting the position information (column 4, lines 60 – 65). Holtzman does not teach a plurality of penpoints, but does suggest the use of alternate marking devices (column 4, lines 55 – 60). Henderson teaches using multiple digitizer pens (column 5, lines 44 – 61), but does not teach one pen with multiple penpoints. However, Yu (figs. 1 & 2) does teach a pen with multiple penpoints (11) and a selector (13).

16. Regarding claim 8, Henderson, as applied to claim 7, further teaches a digitizer that allows a recording medium placed thereon (column 4, lines 10 – 15) and grasps the track drawn on the recording medium by the penpoint of the writing instrument as electronic information (column 4, lines 28 – 35).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Holtzman with the teachings of Henderson and Yu for the purpose of combining multiple digitizer pens into one pen for selecting the desired input operation without changing the holding position of the hand. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

18. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holtzman in view of Henderson and in view of Yu as applied to claim 7 above, and further in view of US Patent 3,819,857 to Inokuchi.

19. Holtzman further teaches using a different frequency for each penpoint selected (column 5, lines 36 – 41), but does not teach how the frequencies are generated. However, Inokuchi (Fig. 4) teaches an input apparatus (11) including an oscillation circuit (12) for generating a predetermined frequency (column 4, lines 45 – 51) and a coil for outputting an electromagnetic wave (10).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Holtzman in view of Henderson and in view of Yu with the teachings of Inokuchi for the purpose of generating the electromagnetic wave used by the digitizer. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

21. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson in view of Holtzman and in view of Yu.

22. Regarding claim 10, Henderson teaches a writing instrument for inputting to a digitizer comprising a plurality of penpoints (column 5, lines 44 – 51) for drawing images on a recording medium placed on said digitizer (column 4, lines 10 – 15) and an electromagnetic wave outputting unit (column 2, lines 30 – 38), but Henderson fails to teach a separate frequency for each penpoint or a selector for each penpoint, however Holtzman teaches a frequency generator for generating a different frequency for each penpoint (column 5, lines 35 – 31) and Yu teaches a penpoint selector for selecting a specific penpoint from said plurality of penpoints (13 and Fig. 3).

23. Regarding claim 11, Henderson in view of Holtzman and in view of Yu, as applied to claim 10, Henderson further teaches a pressure detector (column 5, lines 32

– 36) and outputting an electromagnetic wave according to the detection result by the pressure detector (column 5, lines 36 – 43).

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Henderson with the teachings of Holtzman and Yu for the purpose of combining multiple digitizer pens into one inking pen for creating a digital and paper record while having the ability to select the desired input operation while without changing the holding position of the hand. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

25. Claim 13 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson in view of Holtzman.

26. Regarding claims 13, Henderson (column 14) teaches a method of receiving position information based on the track drawn by the user on the recording medium (lines 35 – 45) and reflecting the track drawn on the recording medium to electronically record the information (lines 43 – 55). Henderson teaches multiple digitizer pens (column 5, lines 44 – 61), but does not explicitly teach sending attribute information, however Holtzman teaches using different frequencies to determine what the attributes are for the input apparatus (column 5, lines 36 – 41).

27. Regarding claim 14, Holtzman, as applied to claim 13, further teaches attribute information on at least one of color and thickness of the line (column 5, line 41) and Henderson (Fig. 3) teaches displaying the electronically recorded image on a display

unit (41) with a color or thickness corresponding to the line drawn on the recording medium (column 12, lines 55 – 60).

28. Regarding claim 15, Henderson (column 14) teaches a method of transmitting coordinate information based on a track drawn in x-y coordinates (column 11, lines 55+). Henderson teaches multiple digitizer pens (column 5, lines 44 – 61), but does not explicitly teach sending attribute information, however Holtzman teaches using different frequencies to determine what the attributes are for the input apparatus (column 5, lines 36 – 41).

29. Regarding claim 16, Henderson (column 14) teaches a storage medium having stored therein a program to be run on a computer (column 12, line 61 to column 13, line 9) a process fore receiving position information based on the track drawn by the user on the recording medium (lines 35 – 45) and reflecting the track drawn on the recording medium to electronically record the information (lines 43 – 55). Henderson teaches multiple digitizer pens (column 5, lines 44 – 61), but does not explicitly teach sending attribute information, however Holtzman teaches a process for recognizing the type of line using different frequencies to determine what the attributes are for the input apparatus (column 5, lines 36 – 41).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Henderson with the teachings of Holtzman for the benefit of sending attribute information with different corresponding frequencies to interact with the electromagnetic digitizer.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It following US patents are cited to further show the state of the art of pen type input devices:

US Patent 5,633,471 to Fukushima

US Patent 6,362,440 to Karidis et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Prizio whose telephone number is (703) 305-5712. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Peter Prizio

Examiner

Art Unit 2674

PP

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
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